United States Patent [19]

Urban

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[54] **SULFUR PRODUCTION**

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[52] **U.S. Cl.** ..... **423/571;** 423/573 R

[51] **Int. Cl.²** **C01B 17/02**

[58] **Field of Search** 423/567, 571, 573; 210/63

[56] **References Cited**

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[57] **ABSTRACT**

A process is disclosed for the production of sulfur which comprises the oxidation of a sulfide solution in the presence of a catalyst comprising a metal phthalocyanine compound to produce sulfur and a polysulfide effluent, decomposition of the polysulfide effluent with steam at a temperature of from about 115° to about 125°C. and a pressure of 10 psig, to about 20 psig. to produce a vaporous phase effluent containing water, hydrogen sulfide and ammonia, the oxidation of at least a portion of the vaporous effluent with an oxygen-containing gas in the presence of a catalyst comprising a metal phthalocyanine compound dispersed on a solid support, said catalyst being in contact with a liquid phase comprising a thiosulfate-containing compound, at a temperature of from about 115° to about 125°C. and a pressure of from about 10 psig. to about 20 psig. to produce steam, sulfur and a thiosulfate compound and the recovery of the resultant sulfur.

12 Claims, 1 Drawing Figure